



CARLETON UNIVERSITY
99th Convocation, Spring 1993



Digitized by the Internet Archive
in 2013

<http://archive.org/details/carletoncovoj181993carl>

1993 Spring Convocation

Convocation at Carleton University	2
Friday, June 18, 10:00 a.m.	
Doctor of Philosophy from the Faculty of Science; Master of Science; Master of Computer Science; Bachelor of Science and Bachelor of Computer Science	9
Friday, June 18, 2:00 p.m.	
Doctor of Philosophy from the Faculty of Engineering; Master of Engineering; Bachelor of Engineering; Bachelor of Architecture and Bachelor of Industrial Design	19
Medallists in the Graduating Class	27
Honorary Degree Recipients	31

*The convocation ceremonies may be heard on FM Associate Listening System
Channel #26. A limited number of receivers are available at each ceremony.*

Convocation at Carleton University

The Convocation ceremony (the calling together of the academic assembly) has its roots in university traditions of medieval Europe.

The Mace

The mace is a staff symbolizing authority. In the days of knighthood, it was a weapon, but after the 16th century it became solely a symbol of authority carried by a distinguished member of an assembly. It is used on ceremonial occasions to signify the right of an individual or institution to perform a certain function—in the case of universities, to grant degrees.

At Convocation, the mace is carried ahead of the Chancellor as he enters and leaves each ceremony. (Marshal of Convocation H.H.J. Nesbitt has performed this function for all but one of the University's Convocations.) During the ceremony the mace is displayed on a special stand as an embodiment of the authority of the University.

Carleton's mace was presented to the University in 1976 as a gift from the Chairman of the Board of Governors at that time, Mr. Hyman Soloway. It is a silver-plated staff approximately three feet long. At the upper end there is a bowl marked with the University's coat of arms and the University motto in both Latin and English—"Opera Nobis Aeterna" and "Ours the Task Eternal." From the upper portion of the bowl rises a phoenix. Traditional oak leaves surround the lower end of the staff.

Coat of Arms

Carleton University's coat of arms is described in heraldic terms as follows: "On a field sable; in radiants d'argent, a maple leaf gules charged with an open book; crest—a phoenix propre." It is comprised of a black shield bearing an open book on a red maple leaf surrounded by silver rays. The shield is surmounted by a phoenix, and below the shield is a scroll bearing the motto "Ours the Task Eternal."

The open book on the maple leaf signifies that Carleton University is in the nation's capital and that learning is open to all who wish to partake of it. The radiants are the light of learning. The phoenix, the legendary eternal bird, symbolizes the renewing of learning from older foundations, in recognition of Henry Marshall Tory's role in the founding of the University when he was 82 years old. "Ours the Task Eternal" is taken from a Walt Whitman poem entitled "Pioneers" and ties in with the eternal quality of the phoenix.

And so, the Carleton University coat of arms symbolizes sound learning, good citizenship, and the highest hopes of humanity.

The Diploma

The diploma the graduates receive at Convocation is the certificate of qualification which publishes the fact that the student has fulfilled all the requirements and completed the prescribed course of study for the degree. As the senior academic legislative body of the University, it is the Senate which has determined whether the requirements have been met. The signatures of both the Chancellor and the President of the University appear on the diploma: the Chancellor because of his role in conferring the degree, and the President who, as Chair of Senate, certifies that Senate has enacted the required motion to award the degree. The Seal of the University is affixed to the diploma as a mark of authentication.

Academic Dress

The academic dress of Carleton University is a compromise between that found in the ancient foundations of Britain and Canada and the American Intercollegiate Code. All three hoods—bachelor's, master's, and doctor's—are of the simple or Oxford shape. Bachelor's is made of black stuff; master's and doctor's are made of black silk and all are lined with silver silk with two chevrons, one of red and one of black. From bachelor's to doctor's the hoods are progressively longer and opened to show more and more of the lining. The velvet border of the hoods denotes the degrees granted according to the following colour combinations: architecture is cerise; arts is white; commerce is camel brown; computer science is royal blue; engineering is orange; industrial design is dark cardinal; journalism is white with a black cord sewn slightly in from the lower border; management studies is camel brown with a black cord sewn slightly in from the lower border; music is venetian pink; public administration is peacock blue; science is golden yellow; social work is cream; and doctor of philosophy is purple.

The bachelor's gown, to be worn with the above hoods, is of full length, made of black stuff, with a gathered yolk behind, and long open-fronted sleeves. The master's gown is of full style, made of black silk or rayon, with full gathered yolk behind, and closed sleeves with an opening at the elbows. The doctoral gown is the same style as the master's, made of fine royal blue cloth with facings of light blue silk.

The gown of the Honorary Doctor of Laws, Literature, Science, and Engineering is a full robe with bell-shaped sleeves, made of fine royal blue cloth with facings and sleeves in light blue silk. The hood is made of the same material as the gown, has the same lining as that for degrees by examination, and is bordered with dark mauve for the degree Doctor of Laws; vibrant blue for the degree Doctor of Literature; red for the degree Doctor of Science; and orange for the degree Doctor of Engineering.

The Presiding Officer of Convocation is the Chancellor of the University,
Arthur Kroeger, O.C., M.A., LL.D.

Accompanying him on the podium are Samuel F. Hughes, Chair of the Board
of Governors, and Robin H. Farquhar, M.A., Ph.D., F.C.C.E.A., President and
Vice-Chancellor.

Assisting the Chancellor are:

Herbert H.J. Nesbitt, M.A., Ph.D., Sc.D., D.Sc., F.L.S., F.E.S.C., F.Z.S.
Professor Emeritus of Biology
and Marshal of Convocation

Michel Gaulin, M.A., Ph.D.
Professor of French, Clerk of Senate
and Assistant Marshal of Convocation

Peter R. Frise, M.Sc., Ph.D., P.Eng.
Assistant Professor of Engineering
and Beadle of Convocation

Kevin R. Goheen, B.A.Sc., Ph.D., P.Eng.
Associate Professor of Engineering
and Beadle of Convocation

Kenneth Hardy, M.Sc., Ph.D.
Associate Professor of Mathematics
and Beadle of Convocation

David T. Lau, B.Eng., M.S., Ph.D.
Assistant Professor of Engineering
and Beadle of Convocation

Ildi Munro, B.A., M.Sc.
Instructor in Earth Sciences
and Beadle of Convocation

Irwin Reichstein, B.Sc., Ph.D.
Associate Professor of Computer Science
and Beadle of Convocation

Also assisting at Convocation:

Kenneth J. McGillivray, B.A., Ph.D.
Adjunct Professor of English and
Assistant Dean, Faculty of Graduate Studies and Research

Ruth Lifeso, B.Sc.
Assistant Dean and Registrar
Faculty of Science and School of Computer Science

R.L. Fleming, B.A.
Assistant Dean (Academic)
Faculty of Engineering

Carol Corkran
Gwen Moodie
Registrar's Office, Faculty of Graduate Studies and Research

Mary Orser
Lisa Ralph
Registrar's Office, Faculty of Science and School of Computer Science

Pegge Clarke
Marlene Groves
Peggy Piccolo
Registrar's Office, Division of Engineering

Anne-Marie Lépine
Carolyn Richer, B.A.
Nadine Scott, B.A.
Norman Smithley
Office of Admissions (Records and Registration Services)

Pamela Mallon
Dolores Neilson
Office of the President

Heather Brown, B.A.
Joan Charron
Nanci Jolicoeur
Tambrae Knapp
Patrick O'Brien, B.A., D.P.A.
Janet Weichel-McKenzie, B.A.
Cheryl Wrightsell
Patricia Zorge, B.A., B.P.E.
Public Relations and Information Services

Cathy Pearen
Senate Office

O Canada

O Canada! Our home and native land!
True patriot love in all thy sons command.
With glowing hearts we see thee rise,
The True North strong and free!
From far and wide, O Canada,
We stand on guard for thee.
God keep our land glorious and free!
O Canada, we stand on guard for thee.
O Canada, we stand on guard for thee.

Order of Proceedings

Friday,
June 18, 10:00 a.m.

Chancellor Arthur Kroeger, O.C., M.A., LL.D., presiding.

(*The audience is requested to stand when the Academic Procession arrives, to remain standing until 'O Canada' has been sung, and at the conclusion of the ceremony to remain until the Academic Procession has left.*)

- Processional Music
John Robert Coghill (bagpipes)
John Robert Coghill, Jr. (bagpipes)
Garry Matthews (drummer)
- O Canada*
(the audience is invited to sing)
- Welcome by the President and Vice-Chancellor
Robin H. Farquhar, M.A., Ph.D., F.C.C.E.A.
- Conferring of Degrees by Examination
 - Warrant
Michel Gaulin, M.A., Ph.D.
Clerk of Senate
 - Introduction of the Medallists
The Clerk of Senate
 - Awarding of the Medals
Leslie A. Copley, M.Sc., Ph.D.
Vice-President (Academic)
 - Conferring of the Degree of Doctor of Science,
honoris causa, upon
Digby Johns McLaren, O.C., M.A., Ph.D., D.Sc., F.R.S.C., F.R.S.
(Presented by J.A. Donaldson, B.Sc., Ph.D., Professor of Earth Sciences)
 - Convocation Address
Digby Johns McLaren
- Recessional Music

*see page 6 for wording

Recipients of Degrees

Doctor of Philosophy

(Presented by Professor J.W. ApSimon,
Dean of the Faculty of Graduate Studies and
Research)

Awarded at the
February Meeting of Senate

Thomas Allen Churchill

B.Sc. (Carleton)

Biology
Metabolic Biochemistry of Freeze
Tolerance in Vertebrates
Supervisor: K.B. Storey

Varsha Subhash Kamal

B.Sc., M.Sc. (Nagpur University, India),
M.Tech. (Indian Institute of Technology,
Bombay)

Biology
The Anaerobic, Phototrophic
Metabolism of 3 - Chlorobenzoate By
Rhodopseudomonas Palustris
Supervisor: R.C. Wyndham

Cindy Hatsuyo Nakatsu

B.Sc., M.Sc. (Toronto)

Biology
The Biochemical Pathway and
Catabolic Genes for Chlorobenzoate
Degradation Encoded on the
Transposon Tn5271 of Alcaligenes SP.
Strain BR60
Supervisor: R.C. Wyndham

Jonathan Craig Hutton

B.Sc. (Carleton)

Chemistry
Some Theoretical and Experimental
Studies in Atomic Absorption
Spectrometry
Supervisor: C.L. Chakrabarti

Hattie Elizabeth Anderson

B.Sc., M.Sc. (New Brunswick)

Geology
A Chemical and Isotopic Study of the
Age, Petrogenesis and Magmatic
Evolution of the Mount Pleasant
Caldera Complex, New Brunswick
Supervisor: R.P. Taylor and J. Blenk

Shui Feng

B.Sc., M.Sc. (Beijing Normal University
China)

Mathematics
Large Deviations of Particle Systems
Supervisor: D.A. Dawson

Awarded at the
June Meeting of Senate

Bradley James Sinclair

B.Ed. (Toronto), B.Sc., M.Sc. (Guelph)

Biology

Phylogenetic classification of the
Clinocerinae, with a revision of the
Nearctic species of *Trichoclinocera*
Collin and *Weidemannia* Zetterstedt
(Diptera: Empididae)

Supervisors: S.B. Peck and D.M. Wood

Andrew Graham Young

B.Sc., M.Sc. (Auckland, New Zealand)

Biology

The effects of forest fragmentation on
the population genetics of *Acer
saccharum* March. (sugar maple)
Supervisor: H.G. Merriam

Marc Bardoux

B.Sc. (Montreal), M.Sc. (Queen's)

Geology

The Okanagan Valley Normal Fault
from Penticton to Enderby South-
central British Columbia
Supervisor: R.L. Brown

Xinhong Ding

B.Sc., M.Sc. (N.T.E.I., China),

M.Sc. (Carleton)

Mathematics
Diffusion Processes with Random
Interactions
Supervisor: D.A. Dawson

Hao Yu

B.Sc. (China Institute of Mining),

M.Sc. (Hangzhou, China)

Mathematics

Weak Convergence for Imperical and
Quantile Processes of Associated
Sequences with Applications to
Reliability and Economics
Supervisor: M. Csörgő

Anna Cornelia Janissen

B.Sc. (Calgary), M.Sc. (Victoria)

Physics

Measurement of the Tau Lepton
Lifetime at OPAL
Supervisor: R. Carnegie

David E. Wilkins

B.Sc. (Queen's), M.Sc. (McGill)

Physics

Radiobiological and magnetic
resonance studies of combined
radiation and cisplatin therapy in the
9L rat brain tumour model
Supervisor: P. Raaphorst

Andrew Rau-Chaplin

B.A. (York), M.C.S. (Carleton)

Computer Science

On Parallel Data Structures and
Parallel Geometric Applications for
Multicomputers
Supervisor: F. Dehne

Master of Science

*Presented by Professor J.W. ApSimon,
Dean of the Faculty of Graduate Studies and
Research*

Awarded at the
February Meeting of Senate

Alexander Brooke Driega

B.Sc. (Carleton)
Chemistry
An Analysis of Factors Contributing to Isotopic ^{13}C Shifts in 1,2-Dialkoxybenzene and Cyclohexane Derivatives

Paule Marie Natalie Morisset

B.Sc. (Ottawa)
Geology
Stable Isotope and Radioisotope Geochemistry of the Panda Hill Carbonatite, Tanzania

Darin Walter Wagner

B.Sc. (Waterloo)
Geology
Volcanic Stratigraphy and Hydrothermal Alteration Associated with the Duck Pond and Boundary Volcanogenic Massive Sulphide Deposits, Central Newfoundland

Javed Chowdhury

B.Sc., M.Sc. (Jahangir Nagar, Bangladesh)
Mathematics

Sandra Eileen Dunlavy

B.Sc. (St. Francis Xavier)
Mathematics

Stephen Heney

B.Sc. (Carleton)
Mathematics

Kimberley Elizabeth Hewitt

B.Sc. (Memorial)
Psychology
Specialization in Neuroscience
Behavioural, Biochemical, and Histological Effects of Perinatal, Intracranial Administration of Excitotoxins

Awarded at the
June Meeting of Senate

Brenda Sylvia Brookes

B.Sc. (Carleton)
Biology
Pollination studies in alfalfa, *Medicago sativa* L. (Leguminosae), with special reference to the alfalfa leafcutter bee, *Megachile rotunda* (F.) (Apoidea)

Alisa Evelyn Cashore

B.Sc. (Carleton)
Biology
Plasmid pBRC60 DNA Integration into the *Comomonas* sp. Genome

Hong Chen

B.Sc. (Beijing Forestry University, China)
Biology
Evaluation of the toxicity of *Salmonella* selective media and modes of action of selenite cystine medium

John Cosmopoulos

B.Sc. (Aristotle University of Thessaloniki, Greece)
Biology
Isolation and sequence analysis of a *Nicotiana tabacum* seed coat-specific genomic region identified by T-DNA tagging

Lynn Marie Davis

B.Sc. (Carleton)
Biology
An ultrastructural, immunocytochemical and biochemical study of the effects of the transcriptional inhibitor DRB on nuclei and nuclear matrices of concanavalin A-stimulated lymphocytes

Jay Richmond Howlett

B.A.Sc. (Waterloo)
Biology
Enhancement of immunoaffinity chromatography processes using polyclonal antibodies and high pressure elution

Gregory Taylor Varney

B.Sc. (Carleton)
Biology
Water uptake into the mature root system of aeroponically-grown maize

David Charles Watson

Biology
Analysis of Polypeptides Associated with *Tipula* Iridescent Virus Particles

Minyi Chen

B.Sc. (Qingdao University of Oceanography, China)
Chemistry
The Structure Binding Relationship of Aluminium Species with Hydrophylic Gels

Gino A. Di Labio

B.Sc. (Carleton)
Chemistry
Relative Stability of Hydrogen Rings

Myra Nichole Michelin

B.Sc. (Carleton)
Chemistry
Mitoxantrone and its Interaction with Lipids, DNA and Cells as Studied by Pressure-Tuning Fourier-Transform Infrared Spectroscopy

Weigang Zhang

B.Sc., M.Sc. (Jilin, China)
Chemistry
(2,2',2"-Terpyridine) Palladium (II) Complexes of Phenylcyanamide and 2,5-Dimethyl-Dicyanamidobenzene Ligands

Xin-Qiang Zhou

B.Sc. (Yunnan, China), M.Sc. (Wuxi Institute, China)
Chemistry
A New Preconcentration Technique for Ultra-Trace Metal Determination in Fresh Water

Angela Lynne Golley

B.Sc. (Queen's)
Geology
Rabbitkettle Hotsprings, Nahanni National Park Reserve, N.W.T.

Bonny Lynn Welsford

B.Sc. (Carleton)
Geology
Petrography and Cement Geochemistry of Sandstones from the Cretaceous Hibernia Formation and Jurassic Jeanne d'Arc Formation, Jeanne d'Arc Basin, Grand Banks, Newfoundland

Pavel Kalab

B.Eng., M.Eng. (Carleton)
Information and Systems Science
Operations Research Techniques
Applied to Network Fault Management

Stephen Thomas Sum

B.Sc. (Waterloo)
Information and Systems Science
Estimation Methods for Finite Mixture Distributions

Elaine Louise Zanutto

B.A. (Carleton)
Mathematics
Jackknife Variance Estimation under Imputation for Missing Survey Data

Master of Computer Science

*Presented by Professor J.W. ApSimon,
Dean of the Faculty of Graduate Studies and Research*

Awarded at the

February Meeting of Senate

Andrzej Biesczad

Magister (Jagiellonian, Poland)
Neurosolver: A Neural Network Based on Cortical Column

David Archie Scott

B.C.S. (New Brunswick)
Speculative Computation for User Interfaces

Natana Valiveti
*B.Comm. (University of Madras, India),
B.C.S. (Carleton)*
Parallel Computational Geometry on
Analog Hopfield Networks

Awarded at the
June Meeting of Senate

Siu-Lun Au
B.C.S. (Carleton)
Characterization of Parallel Programs
and Their Use in Performance
Evaluation of Scheduling Policies

Martin Shepherd Chidyausiku
*B.Sc. (Technische Fachhochschule Berlin,
Germany)*
Efficient Protocols for Distributed
Mutual Exclusion and Termination
Detection

Qi Cui
*B.Sc. (University of Science and Technology,
China)*
Layered Fisheye View Techniques for
Understanding of Large Software
Systems

Daniel Jared Epstein
B.C.S. (Carleton)
Feature Interacting in Object-Oriented
Languages

Youping Huang
B.Sc. (Nanjing, China)
Self Stabilization in Dynamic
Distributed Systems

Ying Lin
*B.S. (Beijing Computer College, China), M.S.
(Peking, China)*
Ameliorating the Drawbacks of the
Grid File

Adel Mamlikoff
*B.Sc. (American University of Beirut,
Lebanon)*
Interoperability in Multidatabases and
its Application to Geographic
Information Systems

Duong Nguyen
B.C.S. (Carleton)
The Visual Object Editing Kit

Juraj Petras
*Diploma (Technical University at Kosice,
Czechoslovakia)*
Modeling and Implementation in an
Object-Oriented Database Management
System

Emran Rafique
B.C.S. (Carleton)
On Asymptotic Algorithms for
Approximating Arbitrary Polygons by
Simpler Convex Polygons

David Gray Thomson
B.C.S. (Carleton)
Believable Specifications: Organizing
and Describing Object Interfaces Using
Protocol Conformance

Anthony Richard Phillip White
B.A., M.A. (Cambridge, England)
Integrating Automata with Genetic
Algorithms in Order to Provide
Adaptive Operators

Yimei Yao
B.Eng. (Harbin, China)
BTS: A New Distributed Data Structure

Jack Robert Zgierski
B.Sc. (Carleton)
On Stochastic Sorting

Bachelor of Science (with Honours)

*(Presented by Professor D.R. Gardner,
Dean of the Faculty of Science, assisted by
representatives of Departments)*

BIOCHEMISTRY

Awarded at the
June Meeting of Senate

Han Yuen Ong
High Honours

Marie-José Séguin
with Honours

Paula Elizabeth Toporowski
with Honours

BIOLOGY

**Awarded at the
February Meeting of Senate**

Leos Loch
with Honours

Awarded at the
June Meeting of Senate

Craig Allan Barr
with Honours

Tarra Lynn Findlay
with Honours

Barbara Ann Holland
High Honours

Larissa Jody Patterson
High Honours

Robert Douglas Saxberg
High Honours

CHEMISTRY

Awarded at the
June Meeting of Senate

Michael Anthony Ashby
with Honours

Jeffrey S. Black
B.Sc. (Carleton)
with Honours

Michael Edward Briggs
High Honours

Peter William Broughton
with Honours

Judy Elizabeth Douglas
Highest Honours

Sean Gabriel Ellul
Highest Honours

Christopher E. B. Evans
Highest Honours

Brian John Halden
with Honours

Karyn Mary O'Flaherty
Highest Honours

Sandy Owega
with Honours

Sara Margaret Whitteker
with Honours

ENVIRONMENTAL SCIENCE

Awarded at the
June Meeting of Senate

Miriam Grace Barclay
with Honours

Terrence John St. Croix
Highest Honours

Scott Donald Wallis
B.Sc. (Carleton)
with Honours

GEOGRAPHY

Awarded at the
February Meeting of Senate

Daniel Carruthers
Highest Honours

Awarded at the
June Meeting of Senate

Sandra Porter
High Honours

GEOLOGY

Awarded at the
June Meeting of Senate

Shelley Juanita Bayne
with Honours

Andrew George Conly
Highest Honours

Susan Katherine Creighton
with Honours

Patrice Pelletier
with Honours

Michael Andrew Peters
with Honours

David Andrew Ross
High Honours

Peter Mark Schaub
High Honours

COMPUTER MATHEMATICS

Awarded at the
February Meeting of Senate

Chi Fung Lo
with Honours

MATHEMATICS

Awarded at the
June Meeting of Senate

Maher Khaddaj
with Honours

Donna Lea Osborne
with Honours

Martin Pergler
Highest Honours

STATISTICS

Awarded at the
February Meeting of Senate

Ilana Fainaru
Highest Honours

PHYSICS

Awarded at the
June Meeting of Senate

Alan T. De Kok
with Honours

Valér Drágán
Highest Honours

Tak Kwong Wong
B.Sc. (Trent)
with Honours

PSYCHOLOGY

Awarded at the
June Meeting of Senate

Joanne Victoria Lucy Cleford
Highest Honours

INTEGRATED SCIENCE STUDIES

Awarded at the
February Meeting of Senate

Julie Ann Beck
with Honours

Awarded at the
June Meeting of Senate

Shealagh E. Pope
Highest Honours

Paul Hugo Sallmen
High Honours

Stewart Allan Slater
High Honours

BIOCHEMISTRY AND BIOTECHNOLOGY

Awarded at the
June Meeting of Senate

Tara Joy Bower
High Honours

BIOLOGY AND BIOTECHNOLOGY

Awarded at the
June Meeting of Senate

Katalin Kinga Alexandra Bertenyi
B.Sc. (Carleton)
Highest Honours

Lorraine Carole Hamilton
High Honours

David J. Rodda
High Honours

BIOLOGY AND GEOLOGY

Awarded at the
February Meeting of Senate

Ingrid Henderson
with Honours

BIOLOGY AND GEOGRAPHY

Awarded at the
June Meeting of Senate

Jack Mah
with Honours

Erin Patricia Neave
High Honours

BIOLOGY AND PSYCHOLOGY

Awarded at the
June Meeting of Senate

Rosalie Ellen Labelle
High Honours

Suzanne Powell
with Honours

GEOLOGY AND PHYSICS

Awarded at the
June Meeting of Senate

Susan Huculak
with Honours

Bachelor of Science

(Presented by Professor D.R. Gardner,
Dean of the Faculty of Science, assisted by
representatives of Departments)

BIOCHEMISTRY

Awarded at the
June Meeting of Senate

Holly Tiffany Hilborn
Biochemistry

Amaresh Pio Antony Philips
Biochemistry

BIOLOGY

Awarded at the
February Meeting of Senate

George L. Lajeunesse
Biology

Catherine Lien-Anh Nguyen
Biology

Natasha Deane Perry
Biology

Pierre Petelle
Biology

Nicole Mary Elizabeth Wheeler
Biology

Awarded at the
June Meeting of Senate

Reantee Bissoon
Biology

Jed Cahill
Biology

Wendy Davison
Biology

Angela Marcy Easton
Biology

Peter Mitchell Engelsberg
Biology

Dariush Fattahi Ghazi
Biology

Rachel Natasha Flegg
Biology

Karen Lise Fraser
Biology

Yeung-On Lee
Biology

James Andrew McCurdy
Biology

Rory Mark O'Neill
Biology

Helen F. Privora
Biology
with distinction

Michael Peter Roberts
Biology

Robyn Leigh Yates
Biology

CHEMISTRY

Awarded at the
February Meeting of Senate

Ronald Reid Lance
Chemistry

Jeffrey Paul Joseph Retty
Chemistry

Awarded at the
June Meeting of Senate

Steven H. Argue
Chemistry

David John Hardy
Chemistry

Ibrahim Mansour
Chemistry

André D. Roy
Chemistry

José Francisco Santos
Chemistry

Taki Thomas Stewart
Chemistry

GEOLOGY

Awarded at the
February Meeting of Senate

Terence John Duffy
Geology

Awarded at the
June Meeting of Senate

Robert William Etherington
Geology

John Christopher Harker
Geology

Susan J. Lambert
Geology

COMPUTER MATHEMATICS

Awarded at the
February Meeting of Senate

Michael Wing Kong Chan
Computer Mathematics

Moon Leung Chan
Computer Mathematics

William Tsui-Tak Lam
Computer Mathematics

Kit-Chiu Lo
Computer Mathematics

Kevin George Sandell
Computer Mathematics

Tim Sheridan
Computer Mathematics

Amrita Varma
Computer Mathematics

Awarded at the
June Meeting of Senate

Thomas K. K. Chia
Computer Mathematics

Tat Min Daniel Chong
Computer Mathematics

Oanh Thi Hoang (Joanne) Hua
Computer Mathematics

Chak Wah Li
Computer Mathematics

James Ivan McAvoy
Computer Mathematics

Nghi Nguyen
Computer Mathematics

Lay Yeem Teoh
Computer Mathematics
with distinction

Vanna Tran
Computer Mathematics

Samuel Paul Washington
Computer Mathematics

Jeffrey Augustus Williams
Computer Mathematics

MATHEMATICS

Awarded at the
February Meeting of Senate

Stephen Joseph Facette
Mathematics

Donald MacDonald
Mathematics

Lai Kan Tam
Mathematics

Awarded at the
June Meeting of Senate

Jeffrey Bruce DeRooy
B.Sc. (Carleton)
Mathematics

Kathy Marie Gaider
Mathematics

Lok Yee Alice Lee
Mathematics

Erwin Stobert
B.Sc. (Alberta)
Mathematics

PHYSICS

Awarded at the
June Meeting of Senate

D'Arcy A. A. Aleck
Physics

Adrian L. Smith
Physics

INTEGRATED SCIENCE STUDIES

Awarded at the
February Meeting of Senate

Frin Suzann Montgomery
Integrated Science Studies

Awarded at the
June Meeting of Senate

Shak-Man Chiu
Integrated Science Studies

Susan Margaret Goff
Integrated Science Studies

Krystyna A. Gudz
Integrated Science Studies

Jamie Hamilton
Integrated Science Studies

Khai-Loi Nhan
Integrated Science Studies

Jennifer Orac
Integrated Science Studies

Donna Lynne Winters
Integrated Science Studies

**Bachelor of Computer Science
(with Honours)**

*Presented by Professor J.R. Pugh,
Director of the School of Computer Science)*

Awarded at the
February Meeting of Senate

Kwan Leung Dao
with Honours

Robert Maxwell Perrin
Highest Honours

Colin David Phillips
High Honours

Robin Anthony Scott Sagriff
with Honours

Paul Christopher Sigurdson
with Honours

Awarded at the
June Meeting of Senate

Jason Anthony Aiken
Highest Honours

Razvan Anton
with Honours

Richard Beauregard
B.Sc. (Carleton)
with Honours

Jason R. Benwell
with Honours

Sean David Boers
with Honours

Sylva Broulik
with Honours

Derek James Burney
Highest Honours

David Francois Caron
High Honours

Dominico Angelo Cerisano
with Honours

Yuet-Ning Chan
High Honours

Terence Andrew Cummins
Highest Honours

David William Curry
Highest Honours

Edward Victor de St. Croix
B.Sc. (Trent)
Highest Honours

Nicolas Edgar
Highest Honours

Craig Robert Hayashi
Highest Honours

Dušan M. Hoferek
High Honours

Bor-Jone Wilson Hung
Highest Honours

Rudolf Johann Jetzelsperger
B.Sc. (Carleton)
with Honours

Judith Margaret Kavanagh
B.A. (New Brunswick)
Highest Honours

Gary Alan Kivenko
with Honours

Benedict Lee
High Honours

Wai Weyls Lee
High Honours

Brian J. LeLacheur
with Honours

Mary Sharon Liska
Highest Honours

Marcellus Robert Mindel
Highest Honours

Ralph Jay Nevins
with Honours

Peter Andrew O'Blenis
High Honours

Long Kien On
with Honours

Anatol Piotrowski
Highest Honours

David Frederic Pollitt
High Honours

Robert Roy Price
Highest Honours

Derek Edwin Risch
High Honours

Timothy Rissmann
with Honours

Steven Richard Shaw
Highest Honours

Jennifer Mary Frances Shea
High Honours

Harvinder Singh
B.Sc. (Carleton)
with Honours

Brian E. Stanke
with Honours

Christopher Peter Story
High Honours

Radek Zelechowski
with Honours

O Canada

O Canada! Our home and native land!
True patriot love in all thy sons command.
With glowing hearts we see thee rise,
The True North strong and free!
From far and wide, O Canada,
We stand on guard for thee.
God keep our land glorious and free!
O Canada, we stand on guard for thee.
O Canada, we stand on guard for thee.

Order of Proceedings

Friday,
June 18, 2:00 p.m.

Chancellor Arthur Kroeger, O.C., M.A., LL.D., presiding.

(The audience is requested to stand when the Academic Procession arrives, to remain standing until 'O Canada' has been sung, and at the conclusion of the ceremony to remain until the Academic Procession has left.)

- Processional Music
John Robert Coghill (bagpipes)
John Robert Coghill, Jr. (bagpipes)
Garry Matthews (drummer)
- O Canada*
(the audience is invited to sing)
- Welcome by the President and Vice-Chancellor
Robin H. Farquhar, M.A., Ph.D., F.C.C.E.A.
- Conferring of Degrees by Examination

Warrant
Michel Gaulin, M.A., Ph.D.
Clerk of Senate
- Introduction of the Medallists
The Clerk of Senate
- Awarding of the Medals
Leslie A. Copley, M.Sc., Ph.D.
Vice-President (Academic)
- Conferring of the Degree of Doctor of Laws,
honoris causa, upon
Martin F. Walmsley, B.Sc., Ph.D.
(Presented by John W. ApSimon, B.Sc., Ph.D., Professor of Chemistry and Dean of the Faculty of Graduate Studies and Research)
- Convocation Address
Martin F. Walmsley
- Recessional Music

*see page 16 for wording

Recipients of Degrees

Doctor of Philosophy

(Presented by Professor J.W. ApSimon,
Dean of the Faculty of Graduate Studies and
Research)

Awarded at the
February Meeting of Senate

Khalil Youssef Ferzli

B.Arch., M.Sc. (Texas)
Civil Engineering
A Comprehensive Integrated
Modelling Framework for the
Optimization of Transit Operator
Workforce Planning and Management
Supervisor: A.M. Khan

Xiuyuan Wu

*B.Eng., M.Eng. (Tsinghua University,
China)*
Civil Engineering
Seismic Behaviour of Clay
Embankment Dams
Supervisors: K.T. Law and
A.P.S. Selvadurai

Brian William Kozminchuk

B.Sc., M.Sc. (Manitoba)
Electrical Engineering
Kalman Filtering of Narrowband
Interference from Direct Sequence
Spread Spectrum Communications
Systems
Supervisor: A.U.H. Sheikh

Wilfrid Paul Leblanc

*B.A.Sc. (British Columbia), M.Eng.
(Carleton)*
Electrical Engineering
Speech Coding at Low to Medium Bit
Rates
Supervisor: S.A. Mahmoud

Awarded at the
June Meeting of Senate

Dennis Gordon Davis

B.Eng. (Lakehead), M.Eng. (Carleton)
Civil Engineering
The Travel Time Predictability
Perspective - A Basis for the Use of
Driver Quality in Traffic Management
Supervisor: J.P. Braaksma

Joanne Lee Boyd

B.Eng., M.Eng. (Carleton)
Electrical Engineering
Designing Reactive Systems for Strong
Traceability
Supervisor: G. Karam

Rolands Eriks Ezers

B.A.Sc. (Toronto), M.Eng. (Carleton)
Electrical Engineering
Analysis of Linear Combining and Its
Applications to Frequency-Hopped
Signals
Supervisor: B. Felstead

Jonathan Carl Beddoes

B.Eng., M.Eng. (Carleton)
Mechanical Engineering
The Processing of Powder
Metallurgically Produced Near γ -
Titanium Aluminide
Supervisor: M.C. de Malherbe

Stephen Ernest Keith

B.A.Sc., M.A.Sc. (Toronto)
Mechanical Engineering
Sources of Noise in Professional Chain
Saws
Supervisor: W.G. Richarz

Master of Engineering

(Presented by Professor J.W. ApSimon,
Dean of the Faculty of Graduate Studies and
Research)

Awarded at the

February Meeting of Senate

MD. Zaydul Hoque

B.Sc. (Bangladesh)
Civil Engineering
Seismic Response of Retaining Walls

Krishnaswamy Anand

*B.Tech. (Indian Institute of Technology,
India)*
Electrical Engineering
ATM Adaptation Layer protocol for
VBR video including FEC

Glenn Peter Cheney

B.A.Sc. (Waterloo)
Electrical Engineering
All Optical Gain Switching of Erbium-
Doped Fibre Amplifiers

Yiu-Ming Leung

B.Sc. (University of Hong Kong)
Electrical Engineering

Sanjay Leela Manney

*B.Tech. (Indian Institute of Technology,
India)*
Electrical Engineering
Transient Analysis of Nonuniform
High-Speed Interconnects

Daniel Simon Omundsen

B.E. (Canterbury, New Zealand)
Electrical Engineering
A Pipelined, Multi-Processor
Architecture for a Connectionless
Server for Broadband ISDN

Edward Pham

B.Eng. (Memorial)
Electrical Engineering
SER Prediction for Transmission of
PSAM 16-QAM in Frequency Selective
Fading Channels

Theodoros Varelas
Diploma of Engineering (University of
Athens, Greece)
Electrical Engineering
A Monolithic BiCMOS Power
Amplifier for Low Power Digital Radio
Transmitter

Wai Keung Wilson Wong
B.A.Sc. (Waterloo)
Electrical Engineering
A Fast Fourier Transform Radix-2
Complex Butterfly with Built-In Self-
Test

Awarded at the
June Meeting of Senate

Karim Alexan
B.Eng. (Concordia)
Aeronautical Engineering
Controlled Oscillation of Forebody
Vortices by Nozzle Jet Blowing

Cameron Lindsay Carnegie
B.A.Sc. (Waterloo)
Aerospace Engineering
An Investigation into the Aerodynamic
Effects of Wing Patches

Nathalie Hétu
B.A.Sc. (Ottawa)
Aerospace Engineering
Behaviour of Separation Bubbles in
Sharp-Edged Gaps of Finite
Dimensions

Jingming Li
B.Eng. (Beijing, China)
Aerospace Engineering
An Adaptive Kalman Filter for Tactical
Missiles Guidance Systems

Rama Radmard
B.Eng. (Carleton)
Aerospace Engineering
An Investigation on the Effects of the
High Maximum-Thickness-To-Chord
Ratio on the Performance of Nozzle
Guide Vanes in a Transonic Planar
Cascade

Jonathan David Stevenson
B.Eng. (Memorial)
Aerospace Engineering
Simulating Indirect Thrust
Measurement Methods as Used on
Modern High-Bypass Turbofans

Bridget Anne Devitt
B.Eng. (Carleton)
Civil Engineering
Design, Analysis and Detailing of
Bolted and Welded Simple Steel
Connections

Mario G. Gervais
B.A.Sc. (Ottawa)
Civil Engineering
The Effects of the Properties of
Geogrids on Reinforced Asphalt
Pavements

Yuxiang He
B.Eng. (Zhejiang, China)
Civil Engineering
Interactive Design of Flexural Steel
Members for Bending: Bending and
Torsion

Vahid Talezadeh Shirazi
B.Sc. (Shiraz, Iran)
Civil Engineering
Level Service and Cost Effectiveness at
the Airport Terminal Curbside Area: A
Theoretical Approach

Daniel Nii Ashitey
B.Sc. (University of Science and Technology,
Ghana)
Electrical Engineering
An Intelligent Personal Communication
System

Frederick George Black
B.Eng. (Carleton)
Electrical Engineering
The Study and Development of a
BiCMOS Operational Amplifier

Liqin Dong
B.Eng. (Hefei, China)
Electrical Engineering
Compressed Voice in Integrated
Services Frame Relay Networks

Alan Douglas Farrell
B.Eng. (McMaster)
Electrical Engineering
Detection of Abnormal Router
Behaviour in a Wide Area Network

Nabeel Muhammad A. Ghuzlaan
B.Sc. (Jordan University of Science and
Technology)
Electrical Engineering
High-Speed Simulation of VBR
Video Coding and Transmission
through an ATM Network Using a
Multiprocessor Architecture

Robert Ian James
B.Eng. (Concordia)
Electrical Engineering
Development of GaAs Charge-Coupled
Devices

Xiao-Dong Li
B.Eng. (Tsinghua, China)
Electrical Engineering
DISC: A Framework for Coordination
in a Distributed Artificial Intelligence
System

Ruolong Liu
B.Eng. (Gangzhou, China), M.Eng. (Wuhan,
China)
Electrical Engineering
Optimization of High-Speed VLSI
Interconnects

Alan D. McKinley
B.Eng. (Carleton)
Electrical Engineering
The Characteristics of Electronic
Communications Traffic in Office
Buildings

John Jackson Nisbet
B.A.Sc. (Waterloo)
Electrical Engineering
Ultralinear Wideband Integrated
Circuit Design

Neil Stuart Pickles
B.Sc. (Queen's)
Electrical Engineering
Design, Modeling and Optimization of
ECL Interface Circuits for BiCMOS
Integrated Systems

Francois Pomerleau
B.Eng. (Quebec)
Electrical Engineering
Visualizing Designs of Object-Oriented
Real-Time Programs

Kenneth Joseph Roy
B.Eng. (Carleton)
Electrical Engineering
Manikka Thyagarajan
B.Eng. (Madras, India)
Electrical Engineering
A Simulation Traffic Study of Indoor
Wireless Communications in the (20-60)
GHz Band

Stephen Ross Todd
B.A.Sc. (Waterloo)
Electrical Engineering
Empirical Evaluation of Diversity
Techniques for Indoor Digital Radio at
1.75 GHz

Jeffrey Allan Watts
B.Eng. (Carleton)
Electrical Engineering
ROOMS, A Relaxation-Based, Object-
Oriented, Mixed-Mode Simulator

Xiaoping Wu
B.Eng. (Beijing, China)
Electrical Engineering
Leaky Bucket Congestion Control in
ATM Networks

George Nicholas Yaremchuk
B.Eng. (Carleton)
Electrical Engineering
Design and Implementation of a
Multiprocessor for DSP and
Communications Systems Algorithm
Evaluation

Derek F. Kuen Yu
B.A.Sc. (Waterloo)
Electrical Engineering
Interference and Traffic Simulation
Studies of Digital In-Building Wireless
Systems

Bin Yuan
*B.Eng. (Hunan, China), M.Eng.
(Southwestern Jiaotong, China)*
Electrical Engineering
PegasusBase: A Run-Time Schema
Extendible System

Jocelyn Mae Jenkins
Diploma, B.A.Sc. (Ottawa)
Mechanical Engineering
Experimental and Theoretical Studies
of Wind-Induced Dry Heat Transfer
Through Clothing

John Michael New
B.Sc. (Calgary)
Mechanical Engineering
Application of the Medial Axis
Transform in a Design Environment for
Die Casting

Diane C. Rocheleau
B.Sc. (Montreal), B.Eng. (Carleton)
Mechanical Engineering

Bachelor of Engineering

(Presented by Professor M.J. Bibby,
Dean of the Faculty of Engineering,
Assisted by the Chairs of Departments)

AEROSPACE

Awarded at the
February Meeting of Senate

Robert Brett Wakeman
with distinction

Awarded at the
June Meeting of Senate

Kevin Beaudette
with high distinction

Kevin John Black
with distinction

Philippe Gaston Bois-Grossiant
with distinction

Carole Marie Rita Bolduc
with high distinction

Roger D. Branconnier

Jennie A. Bundza
with distinction

Tyler Richmond Burns

Gary Michael Buss

Peter J. S. Butler
with high distinction

Yip-Man Jerome Cheung
André Robert Delaney
Stephen Edward Flynn
Brian Charles Franklin
with distinction
Michel Joseph Georges Jean-Paul Fréchette
George Hajeczek
Derek Anthony Hartl
with high distinction
Brian G. Hosler
with distinction
Chantal G. Lamontagne
with distinction
Robert Paul Laporte
Richard Lee
with distinction
Terrance R. MacKinnon
Karel Anne Mae Martinson
with high distinction
Kevin Glenn Mason
Keith J. Massey
William Justin Mayda
with distinction
Wayne Patrick McPherson
B.Sc. (Memorial)
with distinction
Jennifer Senja Moylan
Amit Aloke Nandi
Salven Pillay
Christopher Jacob Reimer
with high distinction
Roy John Riddle
with distinction
Steven Lloyd Schankula
with distinction
Harold Innis Seaborn
Samuel M. Sinanan
Allan Chi-Fung Tang
Jon Erik Torrance
with distinction
Robert John Vandenberg
with distinction
Gajinder Mohan Vij
Colin Gregory Vollrath
Rachel Judith Welch
with distinction

CIVIL

Awarded at the
February Meeting of Senate

Raymond Richard Kostuch
B.Com.(Queen's)
Concentration in Management

William J. Le Maistre

Awarded at the
June Meeting of Senate

Ahmad Ali-Dib

Robert Fraser Atkinson
Concentration in Management

Donna Bradford
with distinction

Scott David Brodersen
with distinction

Christopher David Burgess
Concentration in Management

Bruce William Cane

Omar Hussain Choudhry
with distinction

Anthony Ernest Cook
with distinction

Aaron Scott Dales

Adriano Di Rienzo
with distinction

William Randall Dunn

Patricia Lyn Durocher
with distinction

Kyle R. Gaetano
Concentration in Management

Allan D. Gartner
B.Sc. (Guelph)

R. Tyson Haedrich
B.Sc. (McGill)
with distinction

Eric R. Hodgkinson
with distinction

Barry Holt
Concentration in Management

Jean Patrick Leblanc

Aldo Emilio Martino

Tim D. Newton
with distinction

Tag Clay Shattuck

Ching Fui Shim

Douglas Raymond Sitland
Concentration in Management

Derek Thompson
Robin Trudeau

Gordon Young

COMPUTER SYSTEMS

Awarded at the
June Meeting of Senate

Yayoi Akita Brunet
with high distinction

Roland Evan Aubrey

Michael Andrew Best
with distinction

Radhika Chagarlamudi
with high distinction

Ada Mun-Yee Che
with high distinction

Jeremy S. Frank
with high distinction

Dennis Chi Tat Ko
with high distinction

Karol Mikulash
B.Sc. (McGill), M.Sc. (Western Ontario)
with distinction

Bruce M. O'Hearon

Maher A. W. Sabouny

Farhana Sheikh
with high distinction

Nevein T. Sultan
with distinction

Krzysztof Swider

Stephan Woloszyn

ELECTRICAL

Awarded at the
February Meeting of Senate

Umar Tariq Kabir
with high distinction

Awarded at the
June Meeting of Senate

Abdullah Ahmed
with distinction

Manar Alazma

Safa Almaliki
with high distinction

Colin M. D. Arsenault

Duncan Campbell Breese

Nichol Ling Fung Cheung

Gabriel Chi-Chun Chong

David Murray Clarke

Stephen D. Crooks
Concentration in Management

André J. Desmedt
Concentration in Management

Chris Dow

Allen Marcel Granum

Gary William Haynes

Sivakumar Kandasamy
with distinction

Ting Keung Koon

Charles La Pierre
with distinction

Philippe Francois Lan Kwet Hian

Jeffrey P. Lariviere
with high distinction

Andrew John Marshall
with distinction

Andrew Stewart Matchett

Brian Moore
with distinction

Howard John Northfield
B.Sc. (Queen's)
Concentration in Management
with high distinction

Manmohan S. Panesar

Rajeswaran Rajaratnam

Gary C. Richards

Nader Sabbaghian
with high distinction

Mohammad Salahuddin

Christopher A. Seligy
with high distinction

Mark Stephen Senyshyn

Sumethirai Sivagnanam

Beata Stosik

Jacek Stosik

Chun-Hua Te

Subaskaran Thurairatnam

MECHANICAL

Awarded at the
February Meeting of Senate

Keith David Bowness

Jeffrey Cameron Carver

Jeff R. Dods

Agnesh Marsonia

Sean Howard Reynaud
with distinction

Richard Ryszard Sasiedzki

Awarded at the
June Meeting of Senate

Erik Harold Robin Bouchard

Stephen Elliot Camrass

Philip Chi Kit Cheng

Hiu-Tung Eric Cheung

Tat-Yin Dannie Chung
Concentration in Computer-Integrated
Manufacturing

Linton F. Clarke

Ruth Cooper

Richard Kenneth Cottingham

Douglas Robert Davis

Kenneth Warren Davis

James William Dell

Jean Pierre Dubé
Concentration in Computer-Integrated
Manufacturing
with high distinction

Tamer Khairy El Hussainy

Ailsa Eyvindson
with high distinction

Greg B. Goodwin

Mark G. Gromek

Rajiv Chandra Gupta
with distinction

Denis M. Kasprowicz
Concentration in Computer-Integrated
Manufacturing

Paul Keeping

Christopher A. Lalonde
Concentration in Computer-Integrated
Manufacturing

Marcel Leclerc

Kevin Kwai Hung Leung

Harvey Mah
Concentration in Computer-Integrated
Manufacturing

Hubert Roger Meagher

L. Linton Meyer
Concentration in Computer-Integrated
Manufacturing

Merton Paul Montgomery

Glen Mui
with distinction

Jeffrey John Mumford

Christos Pezoulas

Jonathan Harry Woodrow Puttick
Concentration in Management

Kamran Rahmani

Steven M. Riche
with high distinction

Leonardo Ritorto

Henry Li-Hsin Sung

Desmond J. Sweeney
Concentration in Computer-Integrated
Manufacturing

Stephen Tarnocai

Brant L. Tunney

Jennifer Louise Turcotte

Linda Van de Mosselaer

Ylli Yryku

Bachelor of Architecture

(Presented by Associate Professor
Benjamin Gianni, Director of the School
of Architecture)

Awarded at the
February Meeting of Senate

Kári Eiríksson

Andres Musta

Guy Pigeon
with distinction

Steve R. Purdy

Awarded at the
June Meeting of Senate

James Ross Anderson
with distinction

Luigi Catalli
with high distinction

William Cheng
with high distinction

Donald Chow

Jeffrey Dean Coates

Donald Patrick Collins
with high distinction

Andrea D'Elia
with distinction

Gregory L. F. Damant
with distinction

Antonietta Linda De Giovanni
with distinction

Danna M. de Groot
with high distinction

Benny A. Domingos
with distinction

Marie-Christine Féraud
with distinction

Jennifer Lynn Fraser

Mobolanle Olayinka George
with high distinction

Bradley David Greaves

Paul Anthony Haslhofer
with distinction

Katrina Anna Margaret Herndorf
with distinction

Graham Hill
with distinction

Rukshana Irani

Susan Helen James
with high distinction

Matthew Gary Johnston
B.Sc. (Western Ontario)
with distinction

John Matthew Kim

Areti Kiriakis
B.Tech. (Ryerson)
with distinction

Casey Kwan
with high distinction

Otto M. Lejeune
with high distinction

Constance Hsu-Chuan Lin
with distinction

Assunta Lo Monaco
with distinction

Dean Edward Maglieri

Elizabeth McLoughlin
B.A. (Carleton)

Paul Franklin Meier

Michael G. Nagy
with distinction

Mark Milton Nosanchuk

Frank Joseph Orsini

Pamela Plumb-Dhindsa
B.Sc. (Washington), M.Sc. (California)
with high distinction

Brian Thomas Rex
B.Sc. (Texas)
with distinction

Geoffrey David Roche
with high distinction

Richard Brent Seaker
B.E.S. (Manitoba)

Tze Yin Gordon Tse
B.A.(Concordia)
with distinction

Scott Andrew Weir

Sandra J. Wheeler
with distinction

Ralph D. Wiesbrock
with high distinction

Edmond Yalda

Bachelor of Industrial Design

(Presented by Professor J.R. Giard,
Director of the School of Industrial Design)

Awarded at the
February Meeting of Senate

Claude Nolet
with high distinction

Dean Allan Watson
with distinction

Awarded at the
June Meeting of Senate

Michael Denis Bailey
with high distinction

Stéfane Erhard Barbeau
with high distinction

Annick Cardinal
with distinction

Harish Chauhan
B. Eng. (Carleton)
with distinction

Jay Clintberg
with high distinction

James H. Clugston
B.E.S. (Trent)
with high distinction

Jeffrey James Culhane
with high distinction

James Carl Jensen
with distinction

Steven Keys Jones
B.Eng. (Carleton)
with distinction

Linda J. Kardos Beaudoin

Thomas Krul

Damon Hamilton Langlois
with distinction

Jonathan Paul Loudon

Joanne Barbra MacKie
with high distinction

Michael Stephen McGuire
with high distinction

Sharon Naomi Ohno
with high distinction

Alison Jaye Phillips
with distinction

David Popovich
with high distinction

James Jacob Rempel
with high distinction

Christopher Russell Whatley

a high distinction

Dirk Stewart Zylstra

B.A. (York)

a high distinction

The following degrees were approved by Senate after publication of the 1992 Fall Convocation Program.

Doctor of Philosophy

Kirsten Irene Finstad

B.Sc. (Alberta), M.Sc. (Saskatchewan)

Biology

Biochemical and Developmental
Markers of Induction of Somatic
Embryogenesis in Alfalfa Tissue
Culture

Supervisors: K.W. Joy and
D.C.W. Brown

Katarzyna Malgorzata Ewa

Miedzinska

B.Sc., M.Sc. (Carleton)

Chemistry

A Dynamic Ensemble Model for
Intensity Parameters in
Chiroelectronic Spectroscopy

Supervisor: B.R. Hollebone

Master of Arts

Judith Anne Larocque

B.A. (Carleton)

Public Administration

Bachelor of Arts (with Honours)

Melissa Faith Burgess

Highest Honours in Psychology

Denys Yvon Morel

High Honours in Law

Bachelor of Arts

Dave P.M.P. Dubuc

Debbie A. Hammond

Nazimah Syed Majid

Medallists in the Graduating Class

The Governor General's Medal–Bachelor Degree Program

Awarded annually to a student standing at the head of the graduating class at the bachelor's level.

Donated by His Excellency the Governor General of Canada.

Martin Pergler

Honours Mathematics

The Chancellor's Medal

Awarded annually in the name of the Chancellor of the University to a graduating student of outstanding academic achievement.

Farhana Sheikh

Computer Systems Engineering

The President's Medal

Awarded annually in the name of the President of the University to the student with the highest standing in a pass program of studies.

Leanne Nicole Fisher

Law

University Medal for Outstanding Graduate Work

Awarded, when merited, for outstanding graduate work at the Ph.D. and master's levels.

Ph.D. Level

Hao Yu

Mathematics

Master's Level

Elaine Louise Zanutto

Mathematics

University Medals

Awarded annually, when merited, to the graduating students standing highest in interfaculty studies, arts, social sciences, science, engineering, architecture, commerce, computer science, industrial design, journalism, music, and public administration.

University Medal in Interfaculty Studies

Rupert Hallan Gordon

Honours Mass Communication and Political Science

University Medal in Arts

David Anthony Elver

Honours English

University Medal in Social Sciences

Paul J. William Fryer

Honours Geography and Central/East European and Russian-Area Studies

University Medal in Science

Christopher E.B. Evans

Honours Chemistry

University Medal in Computer Science

Marcellus Robert Mindel

University Medal in Commerce

Kathleen D. Wilson

University Medal in Journalism

Lauralee Elizabeth Bielert

University Medal in Public Administration

Gregory John Tweney

University Medal in Engineering
Steven M. Riche
Mechanical Engineering

University Medal in Industrial Design
Stéfane Érhard Barbeau

Senate Medals

Awarded, when merited, to graduating students of outstanding academic achievement.

Ph.D. Level
Wilfrid Paul LeBlanc
Electrical Engineering (Systems & Computer Engineering)

Bradley James Sinclair
Biology

Master's Level
Daniel Simon Omundsen
Electrical Engineering (Systems & Computer Engineering)

Ritva Helena Williams
Religion

Shoshana Pollack
Social Work

Jack Robert Zgierski
Computer Science

Undergraduate Level
Craig Robert Hayashi
Computer Science

Dawn L. Morgan
English

Shelley Martin
Sociology/Anthropology

Peninah Brickman
Honours Philosophy

Elisabeth Cocco
Political Science

Jeremy S. Frank
Computer Systems Engineering

Heather Maureen Loube
Honours Classics

Edra Chemar Spevack
Psychology

Brent Gilchrist
History and Political Science

Jeffrey P. Lariviere
Electrical Engineering

Brook J. Greenberg
Honours History

E. Matthew Kingswood
Classics

John Andrew Kavcic
Honours History

Kevin Beaudette
Aerospace Engineering

Bor-Jone Wilson Hung
Computer Science

Nader Sabbaghian
Electrical Engineering

Sean Gabriel Ellul
Honours Chemistry

Lesley-Ann Reed
Honours History

Terence Andrew Cummins
Computer Science

Anatol Piotrowski
Computer Science

Rhonda Dien Daman
Psychology

Christopher Jacob Reimer
Aerospace Engineering

Yayoi Akita Brunet
Computer Systems Engineering

Elaine Miriam Quehl
Honours Anthropology and Religion

James Leigh Gunn
Commerce

Ilana Fainaru
Honours Statistics

Sandra Caroline Tagieff
Psychology

Gail Mitchell
Honours English and History

Tanja Monica Kisslinger
Honours Psychology

Alana M. Boltwood
B.A. Honours Statistics

Paul A. Thibaudeau
Honours Anthropology

Scott Wallace Chamberlain
Law

Peter Robert Urmetzer
Honours Sociology

Ann Chi-On Chan
Commerce

Safa Almalki
Electrical Engineering

Ada Mun-Yee Che
Computer Systems Engineering

Julie Lynn MacLellan
Journalism

Nicolas Edgar
Computer Science

Margaret Anne McGee
Journalism and Law

Jean Anderson Sydenham
Classics and Latin

Caroline Eva Kealey
Honours Mass Communication and Political Science

Henry Marshall Tory Award

Presented annually to an outstanding graduating student who has combined a high degree of academic application with a broad participation in extracurricular activities.

Rupert Hallan Gordon
Honours Mass Communication and Political Science

Recipients of Honorary Degrees

Digby J. McLaren, O.C., M.A., Ph.D., D.Sc., F.R.S.C., F.R.S.

Digby McLaren, past president of the Royal Society of Canada and noted geologist, will be awarded the degree of Doctor of Science, *honoris causa*, at the morning ceremony on Friday, June 18, "in recognition of a distinguished contribution to Canadian life as a geologist in the field of palaeontology, and to the international community as a spokesperson on problems and concerns associated with global change."



Dr. McLaren was born in Ireland, and studied at Cambridge University before and after the Second World War, completing his B.A. and M.A. He obtained his Ph.D. in geology from the University of Michigan in 1951.

He joined the Geological Survey of Canada in 1948, and did field work in the Rocky Mountains, the Canadian north and the Arctic Islands, specializing in Devonian stratigraphy and palaeontology. He took part in "Operation Franklin", a major reconnaissance mapping project of the Queen Elizabeth Islands, and contributed largely to the final report. His research and findings in that area were key to the successful exploration for hydrocarbons in Alberta.

Within the Geological Survey he has held the posts of Head of the Palaeontological Section of the Geological Survey, first Director of the Survey's Institute of Sedimentary and Petroleum Geology, and Director of the Geological Survey. In 1981 he was named Assistant Deputy Minister, Science and Technology in the Department of Energy, Mines and Resources. In August, 1981, Dr. McLaren joined the University of Ottawa as a Visiting Professor in the Department of Geology.

He has published over 110 scientific reports and maps in the fields of palaeontology, biostratigraphy and regional geology. He has been a key player in the International Union of Geological Sciences (IUGS), and the International Geological Correlation Program, which is supported by the IUGS and UNESCO. He is an active member of professional societies in Canada, the U.S. and Britain, and served as President of the Royal Society of Canada from 1987 to 1990. He was appointed an Officer of the Order of Canada in 1987.

Martin F. Walmsley, B.Sc., Ph.D.

Dr. Martin F. Walmsley, Director of Technology Ontario in the Ministry of Economic Development and Trade, will be awarded the degree of Doctor of Laws, *honoris causa*, at the afternoon ceremony on Friday, June 18, "in recognition of a distinguished contribution to public policy and university-based research through the design and implementation of the Ontario Centres of Excellence program."



Dr. Walmsley received his B.Sc. and Ph.D. in Industrial Biochemistry from the University of Manchester. From 1957 to 1966 he worked in the antibiotic industry in England, and developed an internationally acclaimed process for manufacturing Penicillin G that increased yields tenfold.

In 1966 he came to Canada as research director at John Labatt Ltd. He joined the management team at Labatt's in 1970, and after a period of secondment to the Ontario government joined the Ontario public service in the Cabinet Office in 1974 as a Policy Advisor responsible for policy advice relating to industry, labour and science. In 1986, he became Director of the Ontario Technology Fund in the Ministry of Industry, Trade and Technology which supported research in industry and universities. In his current role as Director of Technology

Ontario, Dr. Walmsley has fostered the development and viability of the Ontario Centres of Excellence program (which inspired the subsequent federal initiative), the Industry Research Program, and the University Research Incentive Fund. His abilities as a public servant to design, inspire and assist successful collaboration in research linking universities and private enterprise won him the 1992 Xerox Canada-Forum Award.

Reflecting his varied interests, he was a founding partner of the Upper Canada Brewing company, is on the Board of Directors of the Tafelmusik Baroque Orchestra, and is past president of the Toronto Chapter of Sigma Xi.

CPU 88